

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-9 (Canceled).

Claim 10 (Original): A process for obtaining crude 1,3-butadiene by extractive distillation with a selective solvent from a C<sub>4</sub> cut comprising C<sub>4</sub> acetylenes as secondary components in a dividing wall column having a bottom evaporator, in which a dividing wall is disposed in the longitudinal direction of the column to form a first subregion, a second subregion and a lower combined column region, and which is disposed upstream of an extractive wash column, which comprises controlling the energy input into the dividing wall column via the bottom evaporator in such a way that a bottom stream is drawn off from the dividing wall column and comprises solvent laden with the C<sub>4</sub> acetylenes whose proportion of 1,3-butadiene is restricted such that the loss of 1,3-butadiene is economically acceptable, and feeding the bottom stream to an acetylenes outgasser and, in the acetylenes outgasser, stripping out the C<sub>4</sub> acetylenes overhead and obtaining purified solvent as the bottom stream.

Claim 11 (Currently Amended): The process according to claim [[1]] 10, wherein the proportion of 1,3-butadiene in the bottom stream of the dividing wall column is restricted to a maximum of from 0.1 to 2 times the proportion of C<sub>4</sub> acetylenes.

Claim 12 (Currently Amended): The process according to claim [[2]] 11, wherein the proportion of 1,3-butadiene in the bottom stream of the dividing wall column is restricted to 0.3 times the proportion of C<sub>4</sub> acetylenes.

Claim 13 (Currently Amended): The process according to claim ~~[[1]]~~ 10, wherein the energy of the bottom stream of the dividing wall column is utilized for indirect heat exchange with the bottom stream of the acetylenes degasser and/or with the liquid which is drawn off from one or more separation stages in the lower combined column region C of the dividing wall column, and the separation stage from which the liquid is drawn off is selected in such a way that the energy demand for the dividing wall column is minimal.

Claim 14 (Currently Amended): The process according to claim ~~[[1]]~~ 10, wherein the heat content of the bottom stream of the acetylenes outgasser is utilized for indirect heat exchange with the liquid which is drawn off from one or more separation stages in the lower combined column region of the dividing wall column, and the separation stage(s) from which the liquid is drawn off is/are determined in such a way that the energy demand for the dividing wall column is minimal, and/or that the heat content of the bottom stream is utilized for indirect heat exchange with the C<sub>4</sub> cut to be separated which is fed to the dividing wall column.

Claim 15 (Currently Amended): The process according to claim ~~[[1]]~~ 10, wherein thermally coupled columns are used instead of the dividing wall column.

Claim 16 (Currently Amended): The process according to claim ~~[[1]]~~ 10, wherein the C<sub>4</sub> cut is fed to the first subregion of the dividing wall column, the top stream from the first subregion of the dividing wall column is fed to the extractive wash column, into its lower region,

in the extractive wash column, a countercurrent extraction is carried out by charging with a first substream of the selective solvent in the upper region of the extractive wash column,

the components of the C<sub>4</sub> cuts having lower solubility than 1,3-butadiene in the selective solvent are drawn off via the top of the extractive wash column,

the bottom stream from the extractive wash column is recycled into the upper region of the first subregion of the dividing wall column,

second substream of the selective solvent is fed to the dividing wall column in the upper region of the second subregion,

the top product from the second subregion of the dividing wall column is drawn off as crude 1,3-butadiene and

a bottom stream consisting of solvent laden with the C<sub>4</sub> acetylenes, whose proportion of 1,3-butadiene is restricted such that the loss of 1,3-butadiene is economically acceptable, is drawn off from the lower combined column region of the dividing wall column,

the bottom stream is fed to the acetylenes degasser in which the C<sub>4</sub> acetylenes are stripped out overhead and purified solvent is obtained as the bottom stream and is recycled into the process.

Claim 17 (Currently Amended): The process according to claim [[1]] 10, wherein the temperature in the bottom evaporator of the dividing wall column is controlled to a value in the range from 50 to 210°C and the top pressure of the second subregion of the dividing wall column to a value in the range from 1 to 10 bar absolute and the top pressure in the acetylenes outgasser to a value in the range from 1 bar absolute to a maximum of the bottom pressure in the dividing wall column.

Claim 18 (Currently Amended): The process according to claim ~~[[1]]~~ 10, wherein the acetylenes outgasser is integrated by construction into the lower combined column region by configuring the number of theoretical plates in the lower combined column region to a correspondingly larger value and incorporating a gas-tight division in the dividing wall column at the point which corresponds to the upper end of the acetylenes outgasser integrated into the lower combined column region.

Claim 19 (Currently Amended): The process according to claim ~~[[8]]~~ 17, wherein the temperature in the bottom evaporator of the dividing wall column is controlled to 178°C, and the top pressure of the second subregion of the dividing wall column to a value in the range from 2 to 5 bar absolute.

Claim 20 (Currently Amended): The process according to claim ~~[[10]]~~ 19, wherein the top pressure of the second subregion of the dividing wall column is controlled to 3.5 bar absolute.

Claim 21 (Currently Amended): The process according to claim ~~[[7]]~~ 16, wherein the C<sub>4</sub> cut is fed into the middle region of the first subregion of the dividing wall column.